

**Size:** 278 acres  
**Mission:** Maintain, repair, and overhaul nuclear submarines  
**HRS Score:** 67.70; placed on NPL in May 1994  
**IAG Status:** Federal Facility Agreement under negotiation  
**Contaminants:** Heavy metals, PCBs, pesticides, and VOCs  
**Media Affected:** Groundwater, surface water, sediment, and soil  
**Funding to Date:** \$20.8 million  
**Estimated Cost to Completion (Completion Year):** \$84.7 million (FY2015)  
**Final Remedy in Place or Response Complete Date for All Sites:** FY2007



*Kittery, Maine*

## Restoration Background

Portsmouth Naval Shipyard was placed on the National Priorities List (NPL) in May 1994 after it was discovered that surface runoff and erosion from the installation were contaminating the Piscataqua River. Contaminated groundwater was found in the vicinity of five sites.

A Preliminary Assessment in FY83 and a Site Inspection in FY86 identified four potentially contaminated sites. A RCRA Facility Assessment in FY86 identified 28 solid waste management units (SWMUs). Site types at the installation include a landfill, a salvage and storage area, and waste oil tanks. In FY92, the installation completed a RCRA Facility Investigation (RFI).

In FY94, the installation completed an interim measure at the Defense Reutilization and Marketing Office scrap yard, installed a cap on part of the scrap yard, and completed a groundwater and soil gas survey at another SWMU. The installation completed RFI fieldwork to address data gaps, developed onshore media protection standards (MPSs), and completed draft offshore Ecological and Human Health MPSs. Seven underground storage tanks (USTs) were removed during the RFI. Two of these UST sites remain under investigation.

In FY95, the installation prepared final reports on fieldwork conducted in FY94, developed a work plan for data gap investigations and monitoring of the Piscataqua River, initiated an Ecological Risk Assessment (ERA) of the Piscataqua River and Great Bay Estuary, and began developing preliminary remedial goals or MPSs. For the offshore investigation, the Navy Marine Environmental Support Office developed marine sampling and analytical methodologies. A draft Feasibility Study (FS) report for 11 SWMU sites was submitted to regulatory agencies.

The technical review committee, which was formed in FY87, was converted to a Restoration Advisory Board (RAB) in FY95. The community relations plan, which was developed in FY93, was updated in FY96 and FY97.

In FY96, EPA facilitated the smooth transition from the RCRA corrective action program to a CERCLA cleanup program, and the installation began negotiations with EPA and the Maine Department of Environmental Protection (MDEP) on a Federal Facility Agreement. A work plan for investigating groundwater and seeps was completed. Another work plan was prepared for performance of additional site characterizations at four SWMUs, including modeling of offshore migration of contaminants.

During FY97, the installation completed a work plan for SWMUs 10 and 29 and Phase I groundwater modeling for SWMUs 8, 9, 10, 11, and 27. A work plan and three rounds of basewide groundwater sampling also were completed. The installation began a Removal Action at SWMU 9 and completed and signed a no further action document for SWMUs 12, 13, 16, and 23.

## FY98 Restoration Progress

The installation completed a work plan for Sites 30, 31, and 32 and finished Phase II groundwater modeling for SWMUs 8, 9, 10, 11, and 27. Fieldwork for SWMU 10 and Sites 29, 30, 31, and 32 and a fourth round of basewide groundwater sampling were also completed. In addition, the installation completed a Removal Action at SWMU 9 and initiated cleanup of the tank farm.

A work plan and fieldwork for three SWMUs and two sites were completed. The FS for an additional SWMU was not completed because additional site information was required. Completion of the Phase II fate-and-transport modeling was delayed because

site-specific data needed to complete the modeling were unavailable. The basewide groundwater sampling program was completed.

The Navy worked with EPA and MDEP to incorporate the weight-of-evidence approach into the offshore ERA. This approach was instrumental in reaching a consensus on the findings for the offshore ERA. Completion of the offshore ERA was delayed so that EPA, MDEP, the RAB, and the Technical Assistance Grant advisor could work together to write a reader-friendly Executive Summary for the document.

The Navy is using the multisensor towed array detection system (MTADS) to evaluate a possible location of buried drums at Site 8. After this survey, the Navy will initiate test pits to remove drums containing waste.

## Plan of Action

- Complete the offshore ERA and the Phase II fate-and-transport modeling in FY99
- Complete report for basewide groundwater sampling program in FY99
- Complete an interim Record of Decision and an interim offshore monitoring plan for Operable Unit 4 in FY99
- Complete the MTADS survey and report in FY99
- Complete Site Screening Report for three sites in FY00
- Complete supplemental Remedial Investigation report for three sites in FY00
- Complete fieldwork and report in FY00 at OU3

## FY99 FUNDING BY PHASE AND RELATIVE RISK

